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Gandhi et al.

(54) **SHAPE MORPHING FUSELAGE FOR AN AEROCAR**

(71) Applicant: **Toyota Motor Engineering & Manufacturing North America, Inc.**, Erlanger, KY (US)

(72) Inventors: **Umesh N. Gandhi**, Farmington Hills, MI (US); **Taewoo Nam**, Ann Arbor, MI (US)

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(57) **ABSTRACT**

A shape morphing fuselage and method of transitioning an aerocar from a land mode to a flight mode are disclosed. The fuselage includes a plurality of flexible frame members and tensile skin extending between the plurality of flexible frame members as well as an actuation system configured to bend the plurality of flexible frame members between a contracted configuration associated with a flight mode and an expanded configuration associated with a land mode. The fuselage can also include a hatch pivotable about an axis of one of the flexible frame members in the expanded configuration and configured to open for deployment and retraction of wings for the aerocar.